

B1
SUB C1

1. (Amended) A method for ordering inbound inquiries, the method comprising:
receiving plural inbound inquiries, each inbound inquiry having associated inquiry information;
applying a model to the inquiry information to determine a priority value for each inquiry, the model estimating the probability of an inbound inquiry having a predetermined result; and
ordering the inbound inquiries with the priority values.

2. The method of Claim 1 wherein the method inquiries comprise e-mail messages.

3. The method of Claim 1 wherein the method inquiries comprise instant messages.

4. The method of Claim 1 wherein the inbound inquiries comprise inbound telephone calls having associated caller information.

5. The method of Claim 4 wherein the caller information comprises automatic number identification information.

6. The method of Claim 4 wherein the caller information comprise destination number identification information.

7. The method of Claim 4 further comprising:
gathering the caller information with a voice response unit.

8. The method of Claim 4 further comprising:
associating demographic information with each inbound telephone call based on the caller information of the inbound call; and

applying the model to the caller information to determine the priority value for each telephone call.

9. The method of Claim 4 wherein the model predicts caller behavior.

10. The method of Claim 9 wherein the priority value comprises a probability that the telephone call will result in a purchase.

11. The method of Claim 9 wherein the priority value comprises a probability that the caller associated with the telephone call will terminate the call after a hold time.

12. The method of Claim 1 further comprising:
developing plural models from a history of inbound inquiries to forecast plural outcomes that determine the priority value.

13. The method of Claim 12 wherein developing the model further comprises:

applying regression analysis to the history to calculate the priority value.

14. The method of Claim 12 further comprising:

determining the outcomes of the plural inbound inquiries;
and
updating the history with the outcomes of the plural
inbound inquiries.

15. The method of Claim 12 wherein developing the caller
model further comprises:
updating the model with the updated history.

16. A method for determining inbound telephone call
priority, the method comprising:

developing one or more models from a history of inbound
calls, the history having caller information and outcome
results from inbound telephone calls;

applying the model to caller information of a pending
inbound call to predict an outcome of the pending inbound
call; and

associating a priority with the pending inbound call, the
priority based on the predicted outcome.

17. The method of Claim 16 wherein the caller
information comprises telephony information received with the
pending inbound call.

18. The method of Claim 17 wherein the telephony
information comprises automatic number identification
information.

19. The method of Claim 17 wherein the telephony information comprises destination number identification information.

20. The method of Claim 17 wherein the caller information further comprises account information, the method further comprising:

obtaining account information for the pending inbound call, the account information stored in a database by association with the telephony information.

21. The method of Claim 17 wherein the telephony information further comprises information input by the caller through a voice response unit.

22. The method of Claim 21 further comprising:
obtaining account information for the pending inbound call based on the telephony information.

23. The method of Claim 16 wherein developing a model further comprises:

using the caller information as predictive variables that model outcome results.

24. The method of Claim 23 wherein the model comprises a logistic regression model.

25. The method of Claim 23 wherein the model comprises a linear regression model.

26. The method of Claim 16 further comprising:
placing the pending inbound call in the queue of an
automatic call distribution system in an order based on the
priority of the pending inbound call.

27. The method of Claim 26 wherein the predicted outcome
comprises a purchase resulting from the pending inbound call.

28. The method of Claim 26 wherein the predicted outcome
comprises the hold time of the pending inbound call.

29. The method of Claim 16 wherein associating a
priority further comprises optimizing the order for the
inbound telephone calls.

30. The method of Claim 29 wherein optimizing the order
comprises solving a constrained optimization problem using one
or estimates from one or more models.

31. The method of Claim 29 wherein optimizing further
comprises maximizing agent productivity to minimize caller
attrition.

32. The method of Claim 29 wherein optimizing further
comprises maximizing agent productivity to produce sales.

33. (Previously Amended) A system for scheduling inbound
calls, the system comprising:

a receiving device operable to receive plural inbound inquiries and to provide the inbound inquiries to one or more agents; and

a scheduling module interfaced with the receiving device, the scheduling module operable to order the inbound inquiries for handling by the receiving device, the order based in part on the predicted outcome of the inbound inquiries.

34. The system of Claim 33 wherein the inbound inquiries comprise inbound telephone calls.

35. The system of Claim 33 wherein the receiving device comprises an automatic call distribution system.

36. The system of Claim 33 wherein the receiving device comprises a server that supports voice over internet protocol.

37. The system of Claim 33 wherein the receiving device comprises a voice response unit.

38. The system of Claim 34 further comprising:
an inbound call history data base operable to store outcome results and caller information from plural completed inbound calls; and

a modeling module interfaced with the history database and operable to model inbound call outcomes from the stored outcome results and caller information.

39. A system for responding to inbound calls, the system comprising:

a telephone call receiving device interfaced with a network to receive plural inbound calls; and

a scheduling system associated with the receiving device and having a scheduling module that prioritizes the inbound calls in accordance with forecasted outcomes for the inbound calls;

wherein the scheduling system places one or more inbound calls on hold and then releases the inbound call from hold based on the priority of the inbound call.

40. The system of Claim 39 wherein the telephone call receiving device comprises an automatic call distribution system that incorporates the scheduling system.

41. The system of Claim 39 wherein the scheduling system forecasts outcomes with a model derived from a history of inbound calls.

42. The system of Claim 39 wherein the scheduling system orders the inbound calls to optimize an objective function.

43. The system of Claim 42 wherein the objective function comprises agent productivity to minimize inbound call attrition.

44. A method for ordering inbound inquiries, the method comprising:

receiving plural inbound inquiries, from plural inquiry media, each inbound inquiry having associated inquiry information;

applying the inquiry information to one or more models to determine a priority value for each inquiry; and
ordering the inbound inquiries with the priority values.

45. The method of Claim 44 wherein the plural media comprise telephone calls and e-mail messages.

46. The method of Claim 45 wherein the plural media further comprise instant messages.

47. The method of Claim 45 wherein the plural media further comprise voice of internet protocol.

48. (Previously Amended) A method for ordering inbound inquiries, the method comprising:

receiving plural inbound inquiries, from plural inquiry media, each inbound inquiry having associated inquiry information;

applying the inquiry information to one or more models to determine a priority value for each inquiry;

ordering the inbound inquiries with the priority values;
and

scheduling one or more inbound inquiries for an outbound contact attempt at a time based on the priority of the inbound inquiry.

49. (Previously Amended) A method for ordering inbound inquiries, the method comprising:

receiving plural inbound inquiries, from plural inquiry media, each inbound inquiry having associated inquiry information;

applying the inquiry information to one or more models to determine a priority value for each inquiry;

ordering the inbound inquiries with the priority values;
and

informing the inbound inquirer of the time of the outbound contact attempt.

50. (Previously Amended) A method for ordering inbound inquiries, the method comprising:

receiving plural inbound inquiries, from plural inquiry media, each inbound inquiry having associated inquiry information;

applying the inquiry information to one or more models to determine a priority value for each inquiry;

ordering the inbound inquiries with the priority values;

asking the inbound inquirer for a channel and time for a response; and

scheduling a response at the channel and time.

REMARKS

Applicants appreciate the time taken by the Examiner to carefully review Applicants' present application. Applicants have carefully reviewed the Office Action mailed November 6, 2001 (Paper No. 6). Claims 1-50 are pending in this Application and stand rejected by the Examiner. The Examiner further withdrew the allowability of Claims 48-50 in view of newly discovered references. Applicant has amended Claim 1 to